## ABSTRACT

TEM samples are cut from a solid state material with length (l) and width (b) and with a front-side sample surface (7) onto which a curable adhesive of the flowable type is applied for fixing a fiber (2) with a diameter (d) aligned on the sample surface (7) in the longitudinal direction of the sample substantially centrally with respect to the width (b), with the adhesive (3) applied substantially over the entire area on the sample surface (7) and the fiber (2) aligning itself upon being placed onto the adhesive (3) and being wetted essentially along its entire length with the adhesive and the latter subsequently being cured. A simple and economical preparation of TEM samples with high quality is thereby made possible.